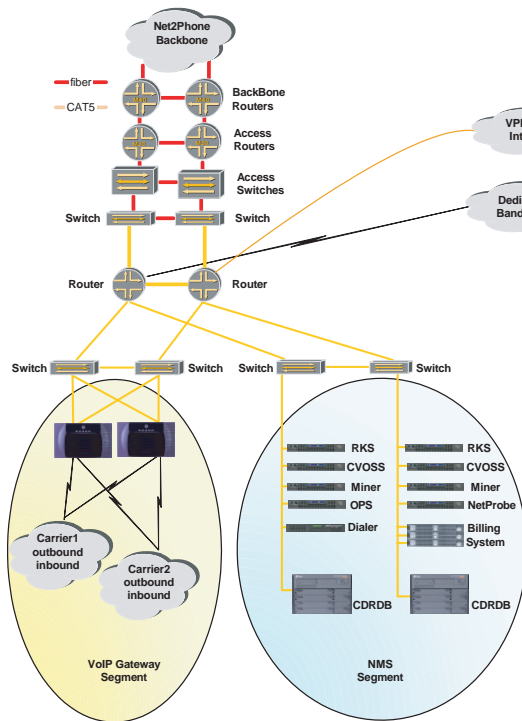


## Net2Phone

The left side of the diagram represents the Net2Phone centrally-located infrastructure, consisting of two network segments:

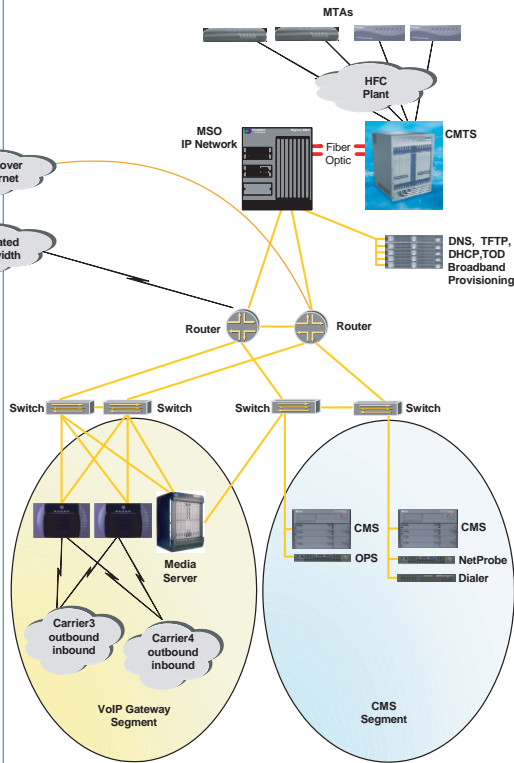
1. VoIP Gateway Segment that interfaces to the PSTN.
2. Network Management Segment that contains the management systems, billing systems, and the Record Keeping Server.



## MSO

The right side of the diagram represents the operator's head-end, voice-specific infrastructure, consisting of three segments:

1. VoIP Gateway Segment that interfaces to the PSTN.
2. CMS (also known as softswitch) Segment that performs all of the call control functions in a fully redundant configuration. By placing the softswitch within the operator's network, the service remains operational for subscribers should a failure of the links back to the Net2Phone segments occur.
3. MSO Local Access Network Segment that contains the CMTS and the MTAs.



## Highlights

### > Multiple Data Links for Network Management

The service remains fully operational even in the event of primary link failure between Net2Phone and the operator. All off-net calls are directed to the local operator VoIP segment. Management data utilizes the backup data link (VPN tunnel).

- Dedicated Point-to-Point Connectivity will be established between the operator and Net2Phone as the primary signaling path for data (control and management functions) and may also be used for voice transport to and from the Net2Phone VoIP gateway segment.
- VPN Tunnel will be established through the Internet as a back-up management link between Net2Phone and the operator. This link is only used for data (control and management functions) between Net2Phone and the operator in the event of point-to-point connectivity failure.

### > Traffic Prioritization

RTP and MGCP have priority within the network over management or other data packets.

### > Redundant Carriers & Redundant Equipment

Should one facility from any carrier fail, a back-up facility exists from another carrier. In addition, actual facilities and loops are provisioned with redundancy to minimize single points of failure. The CMS (softswitch) is deployed in a redundant configuration. The gateways implement highly reliable configurations. Separate gateways are used for each PRI or SS7 facility and can serve as a cold spare if needed.

### > In-Band and Out-of-Band Remote Equipment Management

All systems are monitored using standard management protocols such as SNMP, and can be managed remotely through the redundant data links.